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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,661	07/10/2003	Michiko Ogino	645-163	9956
47888	7590	03/24/2005		
HEDMAN & COSTIGAN P.C. 1185 AVENUE OF THE AMERICAS NEW YORK, NY 10036			EXAMINER BOLDEN, ELIZABETH A	
			ART UNIT 1755	PAPER NUMBER
DATE MAILED: 03/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/616,661	Applicant(s) OGINO ET AL.	
	Examiner Elizabeth A. Bolden	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 10 and 11 is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 12-14 is/are rejected.
- 7) ☐ Claim(s) 7 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/10/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies filed 11 August 2003 have been received.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 10 November 2003 has been considered by the examiner.

Specification

The disclosure is objected to because of the following informalities: Missing punctuation.

On page 15 at the end of the paragraph starting with "Fig. 2" a period is missing at the end of the last sentence.

On page 17 at the end of the fourth paragraph starting with "For achieving" a period is missing at the end of the last sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 102 and 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al., U.S. Patent 4,261,751.

Nakamura et al. teach an optical glass. See abstract of Nakamura et al. Nakamura et al. teach an optical glass having the compositional components as recited in instant claims 1, 2, and 6. See column 1 line 59 to column 2, lines 16. Nakamura et al. teach an optical glass having the refractive index and Abbe number as recited in instant claims 1 and 14. See column 1 lines 47-49.

Nakamura et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1, 2, and 6. Nakamura et al. fail to teach any examples or refractive index or Abbe number ranges that are sufficiently specific to anticipate the property limitations of claims 1 and 14. Nakamura et al. does not teach the optical properties of the glass as recited in claims 3-5, 8, 12, and 13. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

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Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 3-5, 8, 12, and 13.

Claims 1-6, 8, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al., U.S. Application Publication US 2002/0073735 A1 now U.S. Patent 6,786,064 B2.

This rejection is over the U.S. Application Publication US 2002/0073735 A1 because this reference qualifies as prior art under 35 U.S.C. 102(b). However, for convenience, the column and line numbers of US Patent No. 6,786,064 will be cited below.

Hayashi et al. teach an optical glass. See abstract of Hayashi et al. Hayashi et al. teach an optical glass having overlapping compositional components as recited in instant claims 1, 2, and 6. See column 5 lines 49-62. Hayashi et al. teach an optical glass having the refractive index and Abbe number as recited in instant claims 1 and 14. See column 5 lines 34-43.

Hayashi et al. differs from the instant claims by not teaching the glass compositional ranges in terms of weight percent. Hayashi et al. fail to teach any examples or refractive index or Abbe number ranges that are sufficiently specific to anticipate the property limitations of claims

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1 and 14. Hayashi et al. does not teach the optical properties of the glass as recited in claims 3-5, 8, 12, and 13.

It appears that the compositional ranges of Hayashi et al. if converted from mol % to wt % would overlap the compositional ranges of instant claims 1, 2, and 6 since the theoretical composition below anticipate the compositional limitations of instant claims 1, 2, and 6. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 3-5, 8, 12, and 13.

	P ₂ O ₅	Na ₂ O	Nb ₂ O ₅	BaO	B ₂ O ₃	Li ₂ O	TiO ₂	WO ₃	(BaO+Nb ₂ O ₅) {3x(TiO ₂ +WO ₃)+Bi ₂ O ₃ +Nb ₂ O ₅ }
Mol %	20.0	15.0	25.0	23.0	1.0	9.0	5.0	2.0	
Wt %	18.7	6.1	43.9	23.3	0.5	1.8	2.6	3.1	1.1

Claims 1-6, 8, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura et al., U.S. Patent 6,333,282 B1.

Nakamura et al. teach an optical glass. See abstract of Nakamura et al. Nakamura et al. teach an optical glass having the compositional components as recited in instant claims 1, 2, and

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6. See column 3 lines 1-15. Nakamura et al. teach an optical glass having the refractive index and Abbe number as recited in instant claims 1 and 14. See column 2 lines 30-34 and 55-59.

Nakamura et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1, 2, and 6. Nakamura et al. fail to teach any examples or refractive index or Abbe number ranges that are sufficiently specific to anticipate the property limitations of claims 1 and 14. Nakamura et al. does not teach the optical properties of the glass as recited in claims 3-5, 8, 12, and 13. However, overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 3-5, 8, 12, and 13.

Claims 1-6, 8, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishibashi et al., U.S. Patent 4,115,131.

Ishibashi et al. teach an optical glass. See abstract of Ishibashi et al. Ishibashi et al. teach an optical glass having the compositional components as recited in instant claims 1, 2, and 6. See abstract, column 1 lines 47-50, column 2 lines 44-45 and 59-67, column 3 lines 3-5, 17-18, 43-44, 55-57, and 67-68, and column 5, lines 1-34. Ishibashi et al. teach an optical glass having

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the refractive index and Abbe number as recited in instant claims 1 and 14. See column 1 lines 50-53.

Ishibashi et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional limitations of claims 1, 2, and 6. Ishibashi et al. fail to teach any examples or refractive index or Abbe number ranges that are sufficiently specific to anticipate the property limitations of claims 1 and 14. Ishibashi et al. does not teach the optical properties of the glass as recited in claims 3-5, 8, 12, and 13. However, overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claims 3-5, 8, 12, and 13.

Allowable Subject Matter

Claims 7 and 9 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 10 and 11 are allowed.

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Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

The further limitation to the composition of requiring an amount of Gd_2O_3 in the composition makes these claims allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The prior art fail to disclose or suggest a glass composition having the composition as recited in the instant claims, which result in the recited properties. Specifically, the limitation of requiring Gd_2O_3 in the composition in the amounts recited in the claims, while maintaining the ratio in mass % of $(BaO+Nb_2O_5)/\{3x(TiO_2+WO_3)+Bi_2O_3+Nb_2O_5\}$ as recited in the instant claims.

The closest prior art is deemed to be the art of the above rejections by Nakamura et al., U.S. Patent 4,261,751, Hayashi et al., U.S. Application Publication US 2002/0073735 A1, Nakamura et al., U.S. Patent 6,333,282 B1, and Ishibashi et al., U.S. Patent 4,115,131. These publications disclose a similar composition but do not teach the addition of Gd_2O_3 . The addition of Gd_2O_3 would not be an obvious additive of the instantly claimed glass.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

The additional references cited on the 892 have been cited as art of interest since they are considered to be cumulative to or less than the art relied upon in the rejections above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363.

The examiner can normally be reached on 9:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EAB
19 March 2005


KARL GROUP
PRIMARY EXAMINER
GROUP 151